



*City of DeSoto*

## Geodetic Control Network

Surveyed in April and May, 2000

Prepared by:

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***G.P.S. SURVEY REPORT  
GEODETIC CONTROL POINTS 1 to 23  
ESTABLISHED BY TEAGUE NALL AND PERKINS  
FOR THE CITY OF DESOTO, TX.  
IN MARCH AND APRIL OF 2000***

Geodetic Control Points 1 to 23 were either checked and or re-established by the Teague Nall and Perkins Survey Department in the months of March and April of 2000. The purpose of this project was to maintain the integrity of the citywide control network.

The project was performed using Trimble 4000SSI receivers. The receivers were logging both L1 and L2 frequencies. GPSurvey version 2.35a was used to process the baselines. All baselines used were either L1 fixed or Iono Free fixed. The adjustment was performed using the least squares adjustment in Trimnet Plus.

The City of Desoto Control Network is based on the N.G.S. B Order Station “**NEWTON**”. The Datum used is **NAD 83**. The State Plane Coordinates published herein are Texas North Central Zone.

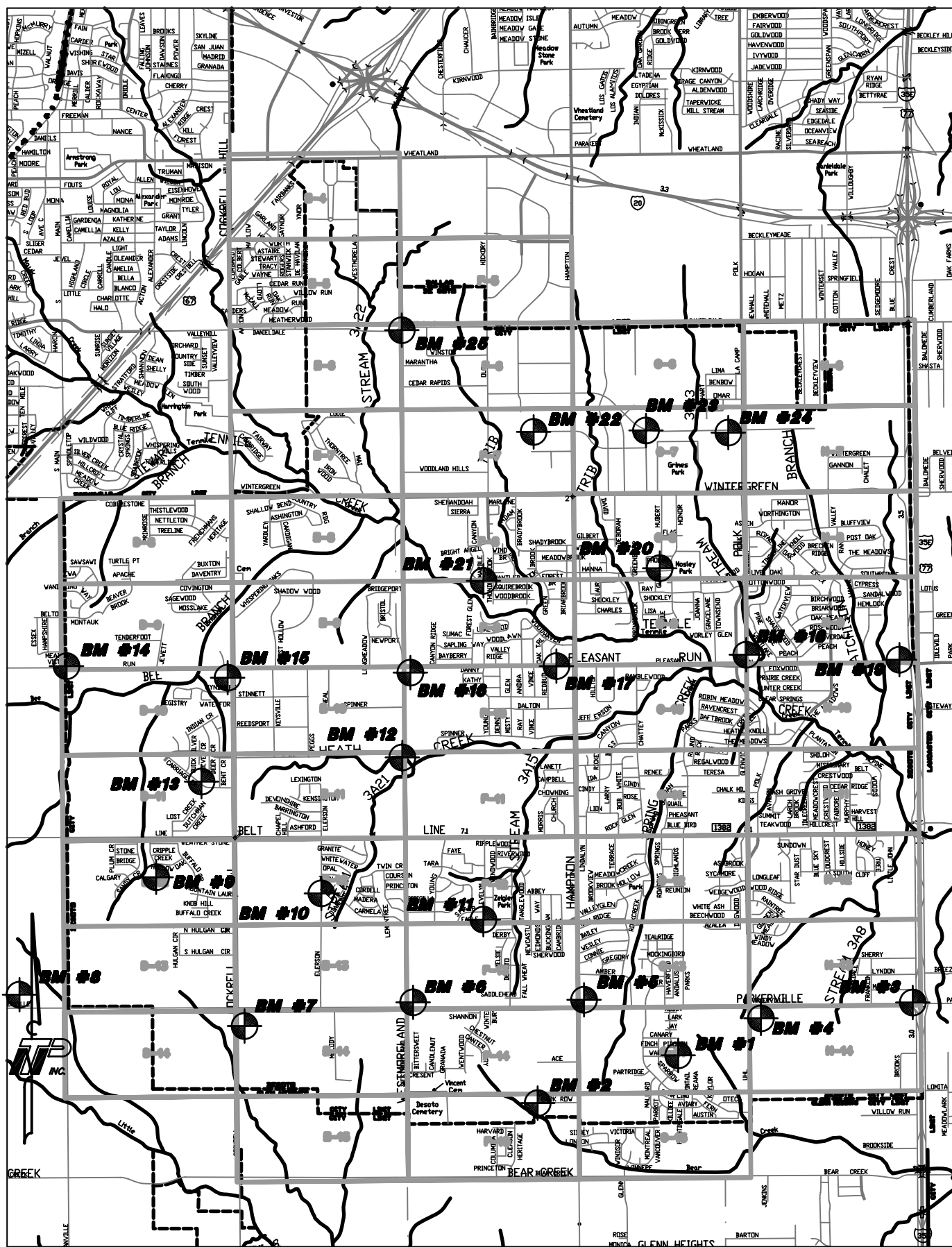
The Vertical Datum published herein is based on the **NAVD 88**. The data published herein meets and /or exceeds Third Order Accuracy.

***BASIS FOR HORIZONTAL POSITION***

The horizontal positions for the Geodetic Control Network for the City of Desoto was established using the N.G.S. B Order Station “Newton”, and the N.G.S. First Order Station “Patton”. These points were held fixed for Horizontal Positioning on the City of Desoto’s monuments 1 to 23. Horizontal positions for monuments 1 to 23 meet and/or exceed Second Order Specifications for Accuracy.

***BASIS FOR VERTICAL DATUM***

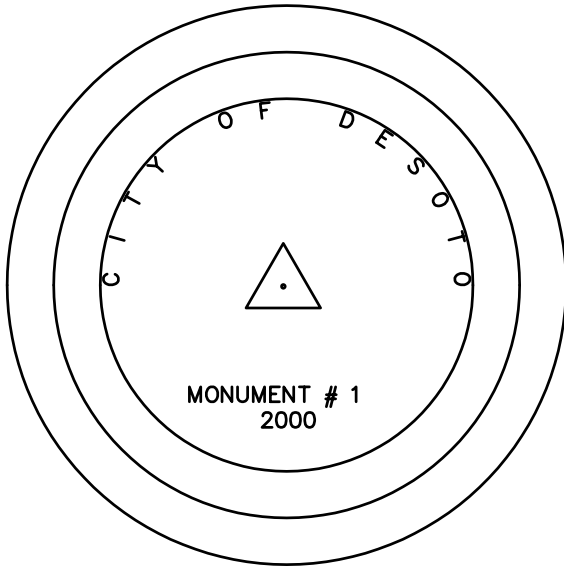
The vertical datum for the Geodetic Control Network for the City of Desoto was established using the N.G.S. Second Order Class 0 Station “Q 265”, and the N.G.S. Second Order Class 0 Station “P 265”. These points were held using Trigonometric leveling techniques. The vertical datum for the City of Desoto’s Geodetic Control Network points 1 to 23 meets and/or exceeds Third Order Accuracy.



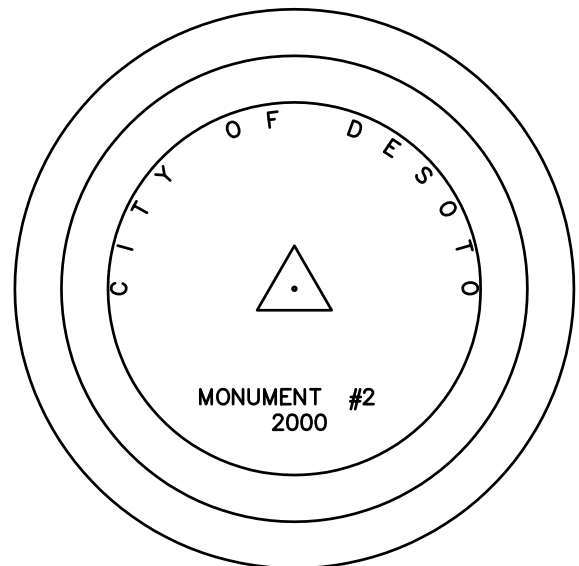
SCALE: 1"=4000'

CITY OF DESOTO BENCHMARK CONTROL NETWORK MAP

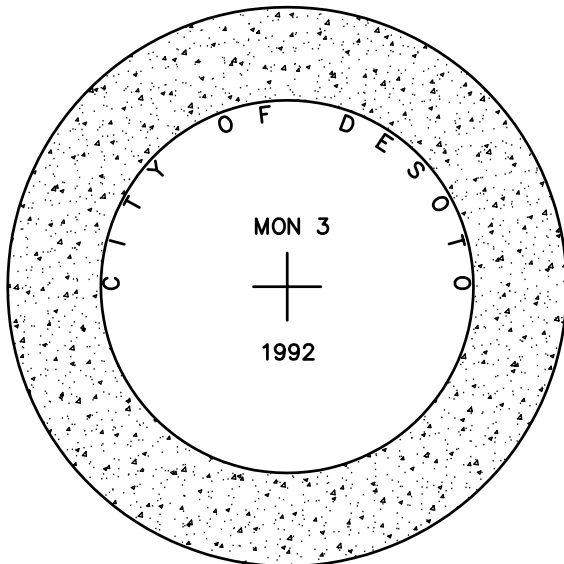
## SKETCH OF MONUMENTS



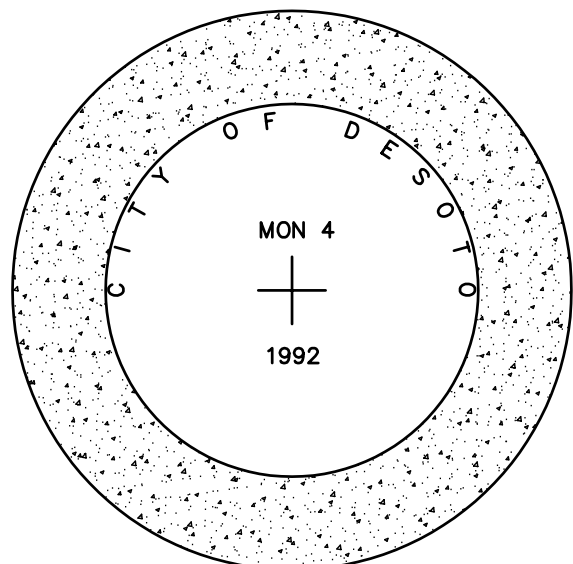
BERNTSEN TOP SECURITY MONUMENT W/ACCESS COVER



BERNTSEN TOP SECURITY MONUMENT W/ACCESS COVER

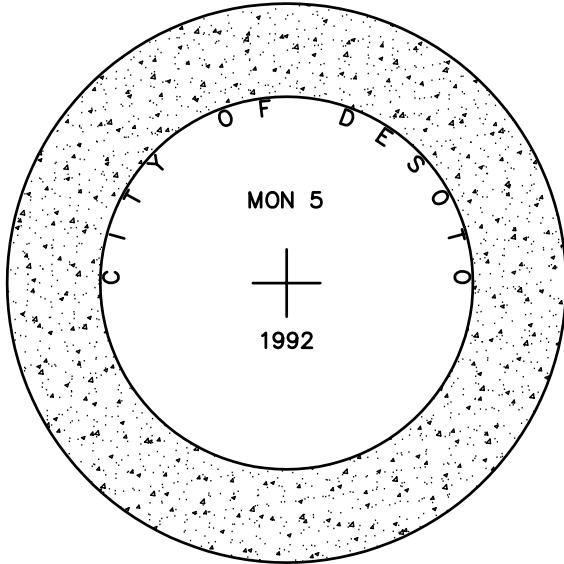


ALUMINUM CAP SET IN CONCRETE

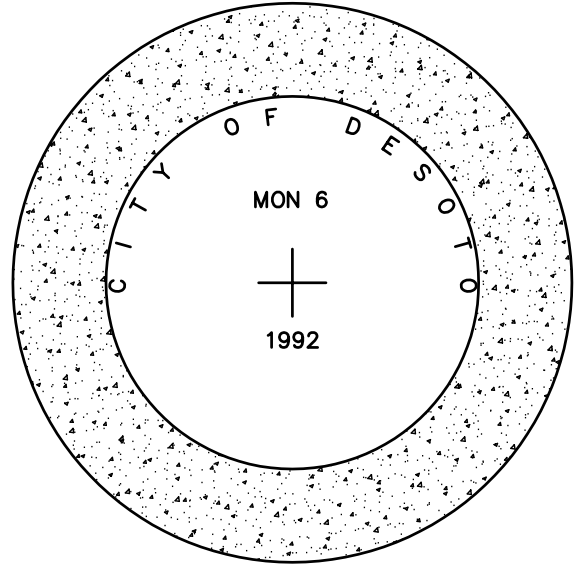


ALUMINUM CAP SET IN CONCRETE

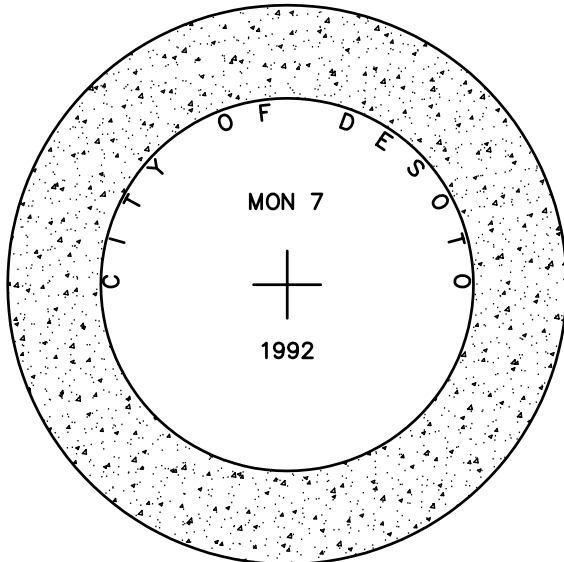
## SKETCH OF MONUMENTS



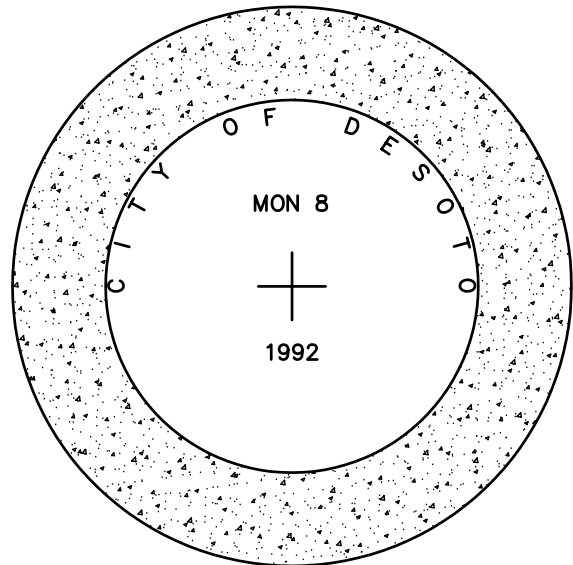
ALUMINUM CAP SET IN CONCRETE



ALUMINUM CAP SET IN CONCRETE

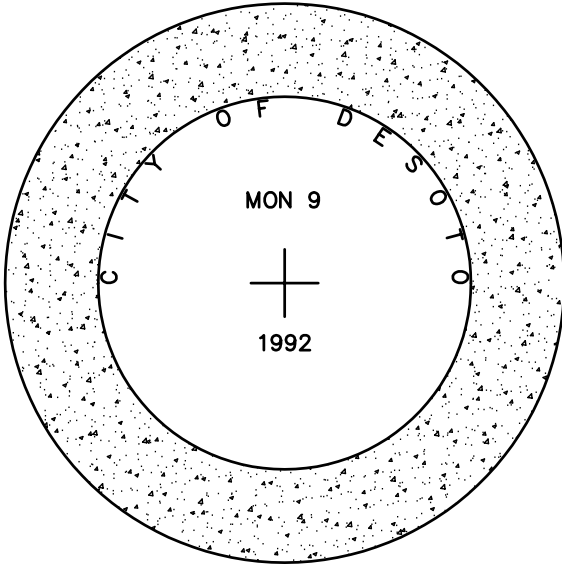


ALUMINUM CAP SET IN CONCRETE

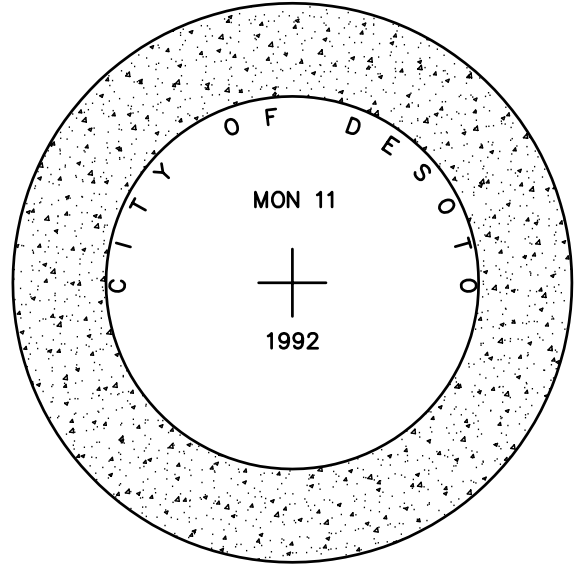


ALUMINUM CAP SET IN CONCRETE

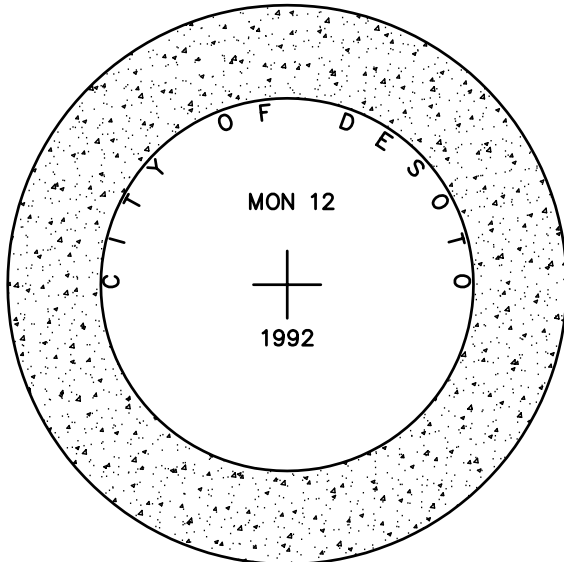
## SKETCH OF MONUMENTS



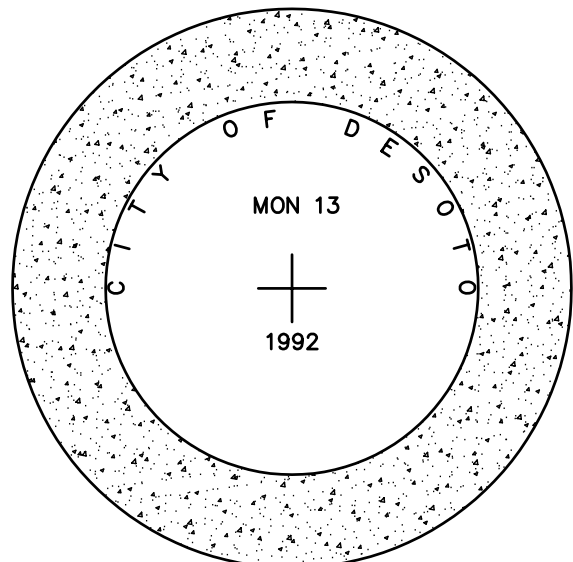
ALUMINUM CAP SET IN CONCRETE



ALUMINUM CAP SET IN CONCRETE

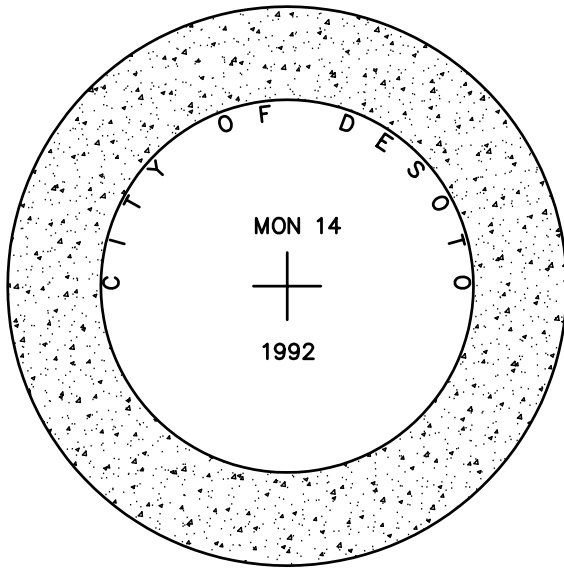


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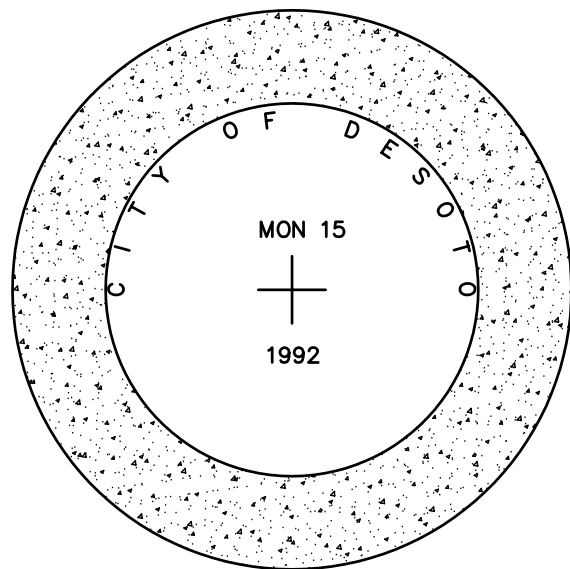


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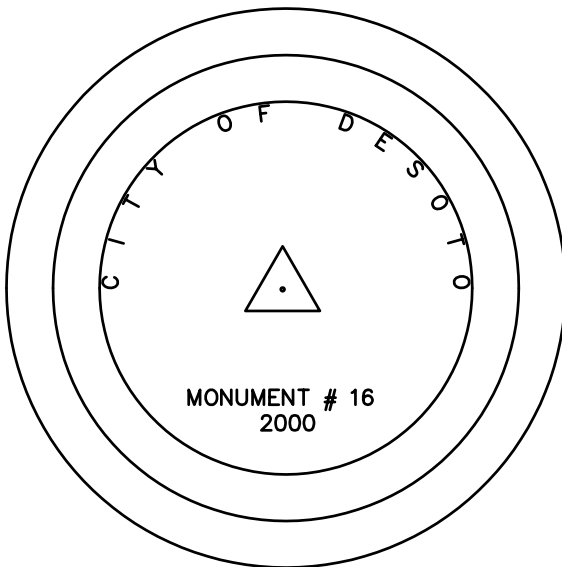
## SKETCH OF MONUMENTS



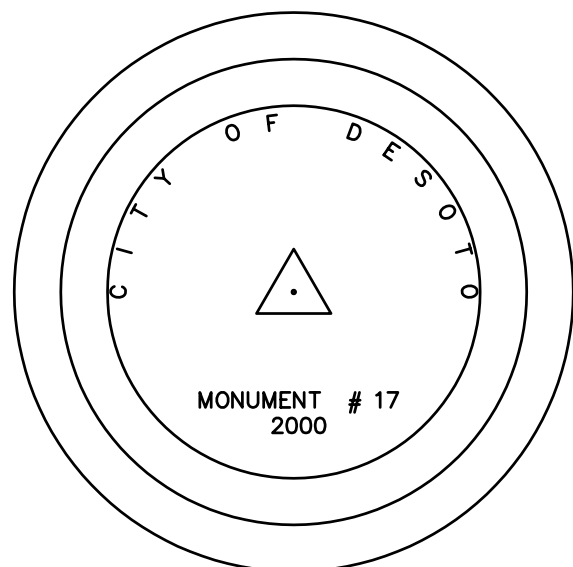
ALUMINUM CAP SET IN CONCRETE



ALUMINUM CAP SET IN CONCRETE

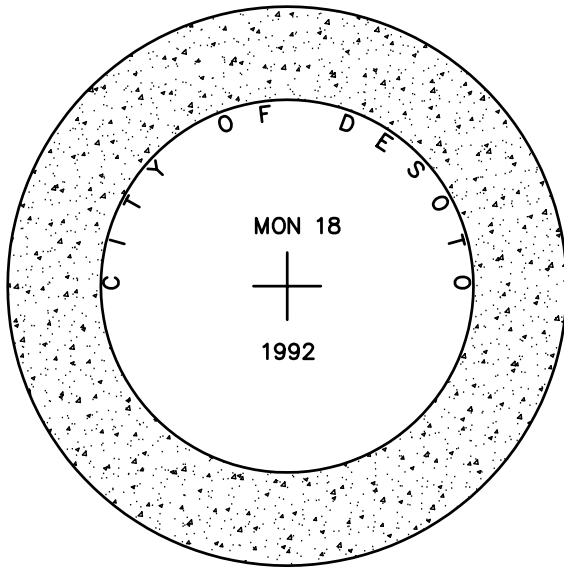


BERNTSEN TOP SECURITY MONUMENT W/ACCESS COVER

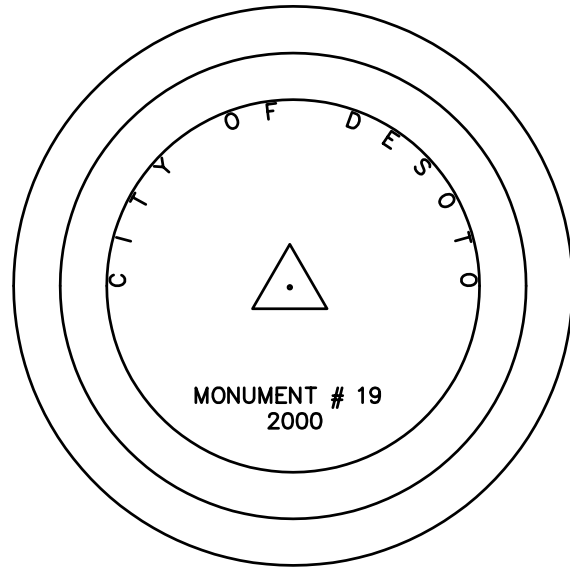


BERNTSEN TOP SECURITY MONUMENT W/ACCESS COVER

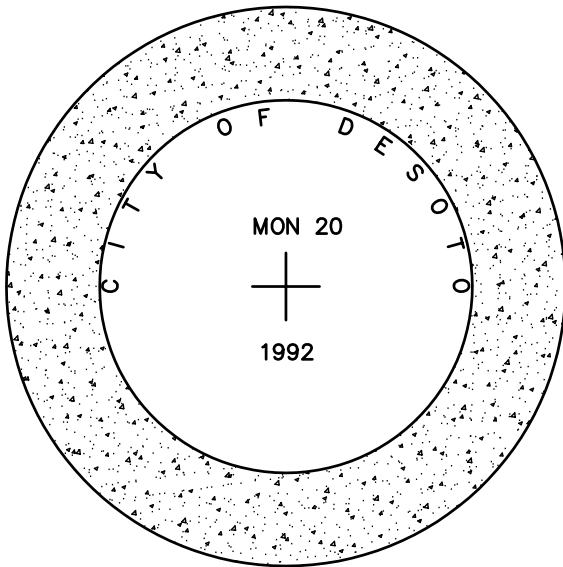
## SKETCH OF MONUMENTS



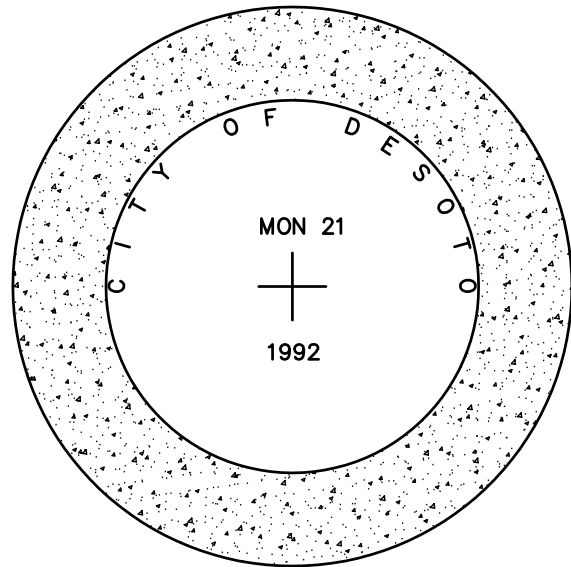
ALUMINUM CAP SET IN CONCRETE



BERNTSEN TOP SECURITY MONUMENT W/ACCESS COVER



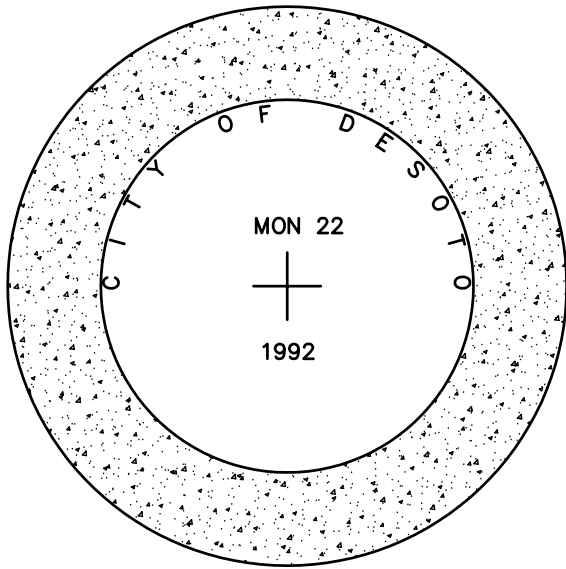
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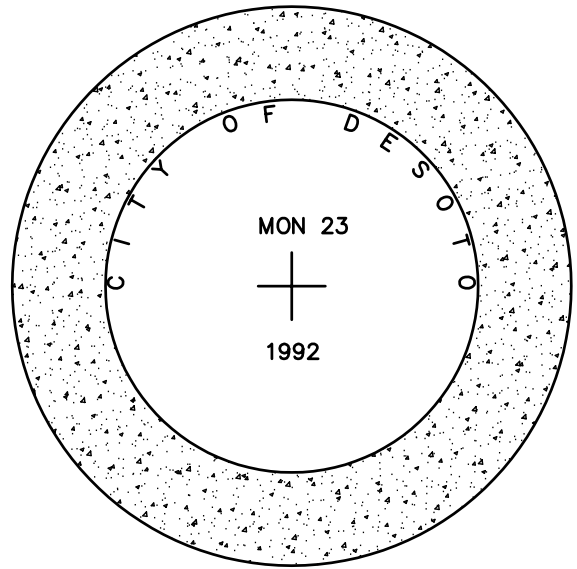
ALUMINUM CAP SET IN CONCRETE



## SKETCH OF MONUMENTS



ALUMINUM CAP SET IN CONCRETE



ALUMINUM CAP SET IN CONCRETE



City of DeSoto

## BENCHMARK

BENCHMARK NO. 1

DESCRIPTION: BOX CUT ON TOP OF CURB  
AT PT OF RETURN ON N/W  
CORNER OF AVERY DRIVE  
AND WARBLER DRIVE AND  
18' NORTH OF SSMH AND 38'  
EAST OF LIGHT POLE.

ELEV.= 681.72'

MAPSCO 84 N

SKETCH:

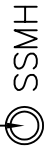
LIGHT POLE



38'

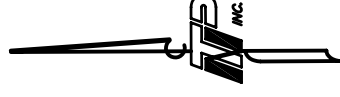
BENCHMARK #1

18'



WARBLER DRIVE

AVIARY DRIVE



N.T.S.



City of DeSoto

# BENCHMARK

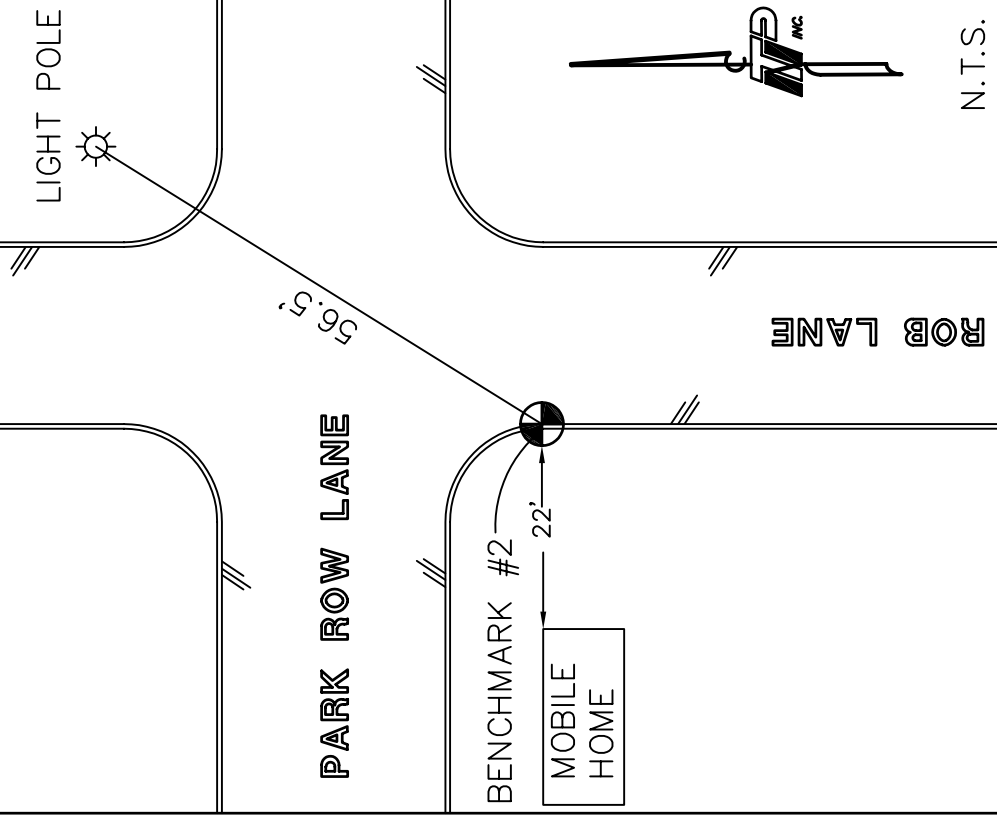
BENCHMARK NO. 2

DESCRIPTION:

SQUARE CUT IN THE TOP OF CURB AT THE  
PC OF CURB AT S/W INTERSECTION  
OF ROB LANE & PARK ROW LANE.

ELEV.= 695.951'

SKETCH:



MAPSCO 83 V



City of DeSoto

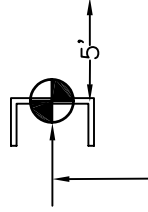
# BENCHMARK

BENCHMARK NO. 3

DESCRIPTION: BOX CUT ON TOP OF 4" WIDE  
CONCRETE HEADWALL WEST OF  
EDGE OF WEST FRONTAGE RD.  
AND NORTH OF PARKERVILLE RD.

ELEV.= 614.83'

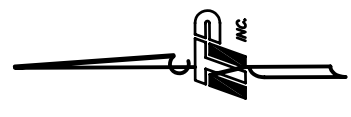
BENCHMARK #3



TOTAL  
GAS

PARKERVILLE ROAD

SKETCH:



N.T.S.

MAPSCO 84 R

I-35E W. FRONTAGE ROAD



City of DeSoto

## BENCHMARK

BENCHMARK NO. 4

### DESCRIPTION:

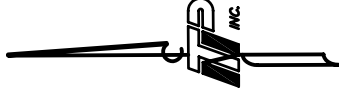
RR SPIKE SET IN NORTH  
FACE OF POWER POLE AT  
S/E CORNER OF PARKERVILLE  
ROAD AND UHL ROAD.

ELEV.= 650.26'

SKETCH:

PARKERVILLE ROAD

UHL ROAD



MAPSCO 84 P

N.T.S.



BENCHMARK #4



City of DeSoto

# BENCHMARK

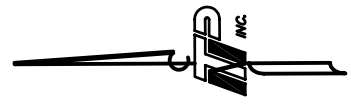
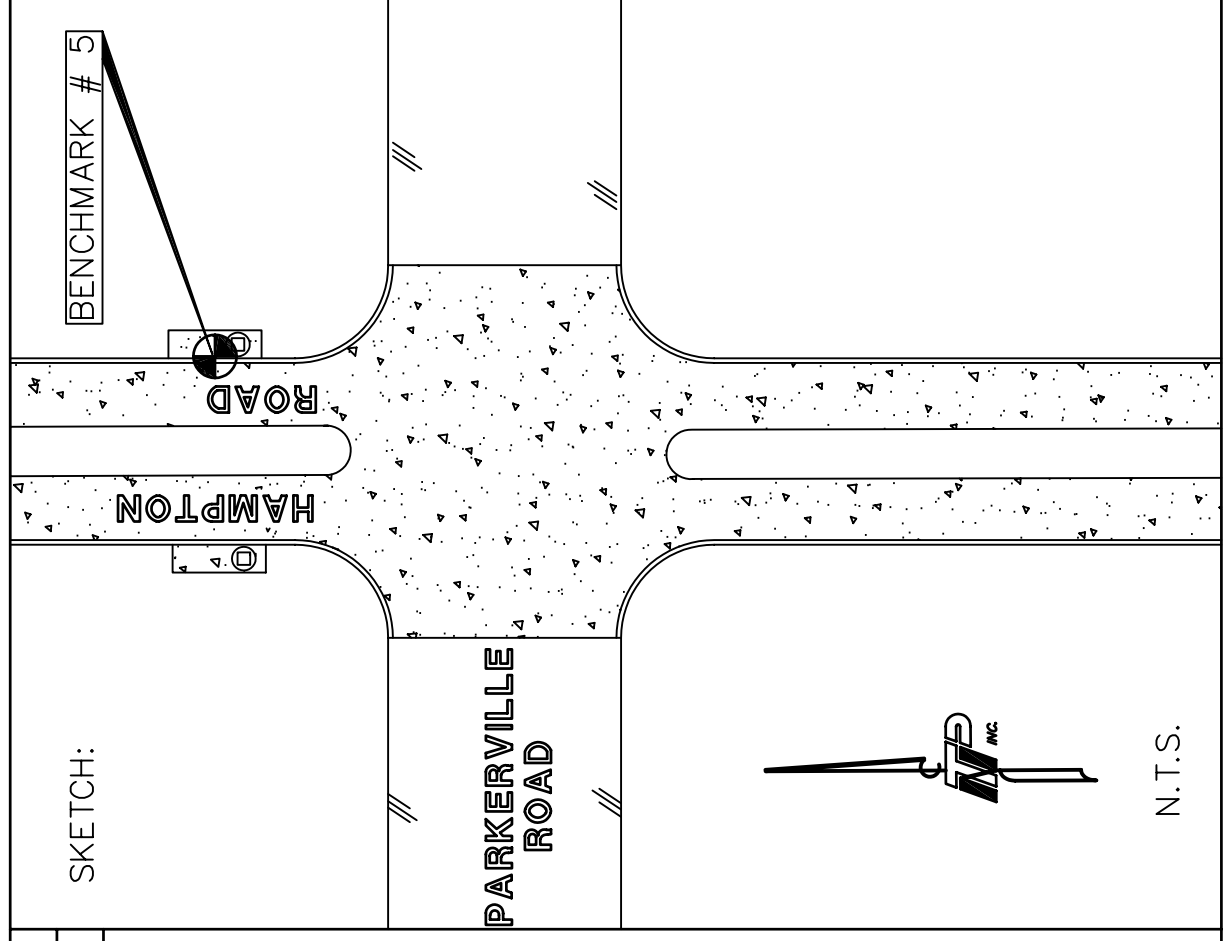
BENCHMARK NO. 5

DESCRIPTION: BOX CUT ON TOP OF CURB  
ON C/L 10' INLET AT N/E CORNER  
OF INTERSECTION OF HAMPTON  
ROAD AND PARKERVILLE ROAD.

ELEV.= 684.38'

MAPSCO 83 R

SKETCH:





City of DeSoto

**BENCHMARK**

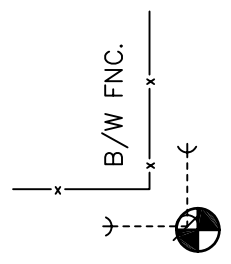
BENCHMARK NO. 6

DESCRIPTION: RR SPIKE SET IN SOUTH SIDE  
OF POWER POLE AT N/E COR.  
OF INTERSECTION OF PARKER-  
VILLE ROAD AND WESTMORELAND  
ROAD.

ELEV.= 743.808'

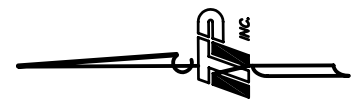
SKETCH:

BENCHMARK # 6



PARKERVILLE ROAD

WESTMORELAND ROAD



MAPSCO 83 P

N.T.S.



City of DeSoto

**BENCHMARK**

BENCHMARK NO. 7

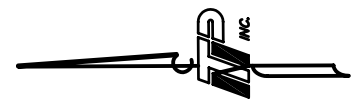
DESCRIPTION: RR SPIKE SET IN WEST FACE  
OF POWER POLE AT S/E COR.  
OF INTERSECTION OF PARKER-  
VILLE ROAD AND COCKRELL HILL  
ROAD.

ELEV.= 716.53'

SKETCH:

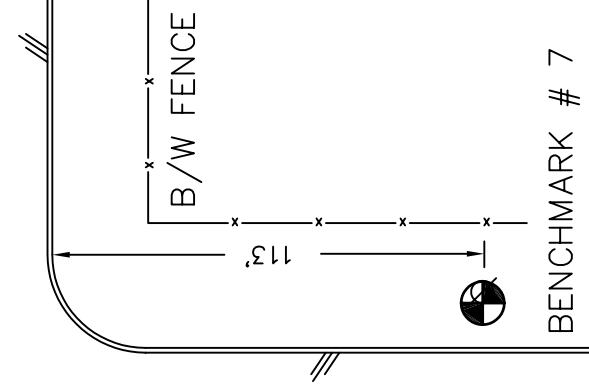
PARKERVILLE ROAD

COCKRELL HILL ROAD



MAPSCO 82 R

N.T.S.



BENCHMARK # 7





City of DeSoto

# BENCHMARK

BENCHMARK NO. 8

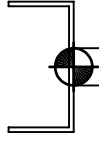
DESCRIPTION:

SQUARE CUT ON THE CENTERLINE OF THE CONCRETE HEADWALL ON THE NORTH SIDE OF PARKERVILLE ROAD, AND THE WEST SIDE OF DUNCANVILLE ROAD.

ELEV.= 732.86'

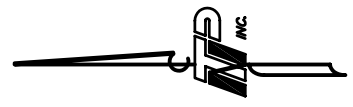
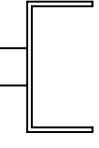
SKETCH:

BENCHMARK #8



PARKERVILLE ROAD

DUNCANVILLE ROAD



N.T.S.

MAPSCO 82 K



City of DeSoto

## BENCHMARK

BENCHMARK NO. 9


### DESCRIPTION:

SQUARE CUT IN THE TOP OF CURB IN THE CENTERLINE OF A 10' INLET LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF LAUREL SPRINGS DRIVE AND MOUNTAIN LAUREL LANE.

ELEV.= 726.43'

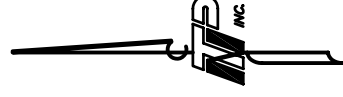
### SKETCH:

BENCHMARK #9



LAUREL SPRINGS DRIVE

MOUNTAIN LAUREL LANE



MAPSCO 82 L

N.T.S.



City of DeSoto

## BENCHMARK

BENCHMARK NO. 10

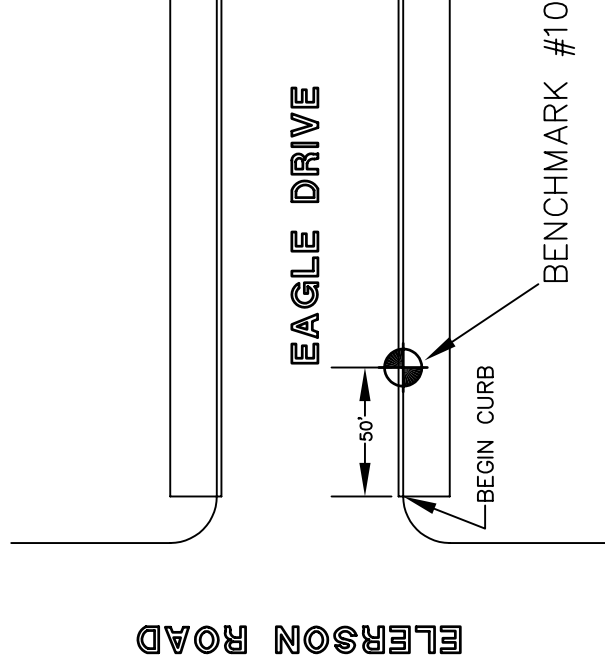
### DESCRIPTION:

SQUARE CUT ON THE TOP OF THE SOUTH CURB OF EAGLE DRIVE,  $\pm$  50' FEET EAST OF ELERSON ROAD.

ELEV.= 705.28'

MAPSCO 83 E

### SKETCH:



N.T.S.



City of DeSoto

## BENCHMARK

BENCHMARK NO. 11

### DESCRIPTION:

SQUARE CUT ON THE TOP OF CURB AT THE  
NORTHWEST CORNER OF EAGLE DRIVE AND  
EVELYN STREET.

ELEV.= 676.64'

### SKETCH:

EVELYN STREET

BENCHMARK #11



EAGLE DRIVE



N.T.S.

MAPSCO 83 L



City of DeSoto

## BENCHMARK

BENCHMARK NO. 12

### DESCRIPTION:

SQUARE CUT ON THE TOP OF A 3' WALL  
AT THE NORTHWEST CORNER OF THE  
WESTMORELAND ROAD BRIDGE OVER  
HEATH CREEK, AND +/- 250' SOUTH  
OF SPINNER ROAD.

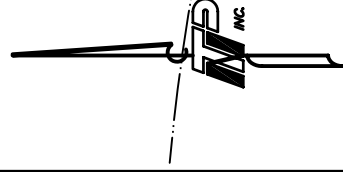
ELEV.= 633.80'

### SKETCH:

WESTMORELAND ROAD

SPINNER ROAD

BENCHMARK #12



NORTH BRANCH HEATH CREEK

MAPSCO 83 B

N.T.S.



City of DeSoto

## BENCHMARK

BENCHMARK NO. 13

### DESCRIPTION:

SQUARE CUT IN THE TOP OF CURB AT THE NOSE OF THE MEDIAN AT THE CENTERLINE OF SILVERCREEK DRIVE AND EAST OF CARRIAGE CREEK DRIVE.

ELEV.= 708.91'

### SKETCH:

BENCHMARK #13

SILVER CREEK DRIVE

CARRIAGE CREEK DRIVE



MAPSCO 82 D

N.T.S.



City of DeSoto

## BENCHMARK

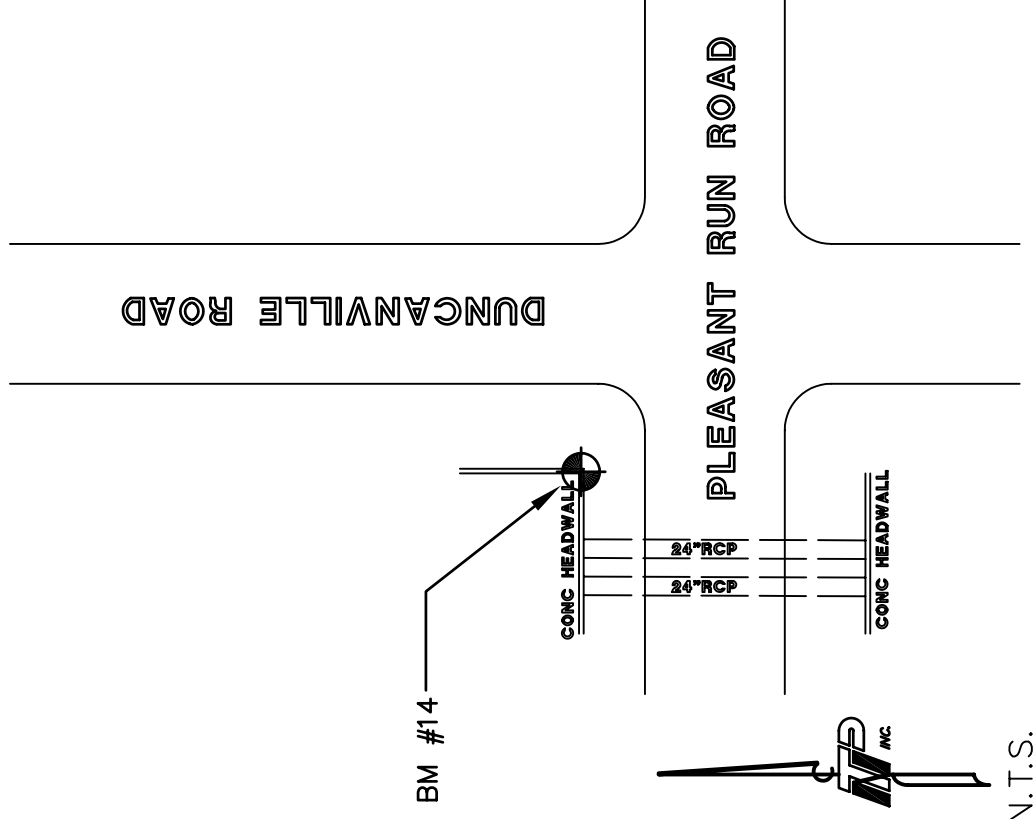
BENCHMARK NO. 14

DESCRIPTION: SQUARE CUT ON TOP OF THE SE CORNER OF A HEADWALL AND IS LOCATED AT THE NW CORNER OF INTERSECTION @ DUNCANVILLE RD AND PLEASANT RUN ROAD.

ELEV.= 703.44

MAPSCO 72 Y

SKETCH:





City of DeSoto

# BENCHMARK

BENCHMARK NO. 15

DESCRIPTION: SQUARE CUT ON T/C AT PI OF PARKING LOT OF THE DALLAS 1ST CHURCH OF THE NAZARENE LOCATED AT THE SW CORNER OF INTERSECTION OF PLEASANT RUN ROAD & COCKRELL HILL ROAD.

ELEV.= 685.88

MAPSCO 72 Z

SKETCH:

PLEASANT RUN ROAD

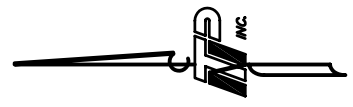
CONC PARKING LOT

"DALLAS FIRST CHURCH"  
OF THE NAZARENE

BM #15

CHURCH  
SIGN

COCKRELL HILL ROAD



N.T.S.





City of DeSoto

## BENCHMARK

BENCHMARK NO. 16

DESCRIPTION: SQUARE CUT ON TOP OF WEST  
END OF A RETAINING WALL AT  
SE CORNER OF INTERSECTION  
PLEASANT RUN ROAD AND  
WESTMORELAND ROAD.

ELEV.= 645.85

MAPSCO 73 X

SKETCH:

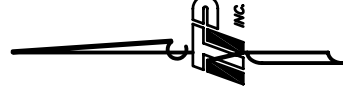
PLEASANT RUN ROAD

WESTMORELAND ROAD

4' CONC WALK

CONC RETAINING WALL

BM #16



N.T.S.



City of DeSoto

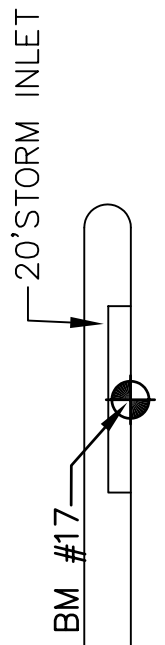
# BENCHMARK

BENCHMARK NO. 17

DESCRIPTION: SQUARE CUT ON TOP OF CURB  
IN CL OF A 20' INLET ON THE  
SOUTH SIDE OF WEST MEDIAN  
OF PLEASANT RUN ROAD AT  
INTERSECTION WITH HAMPTON  
ROAD.

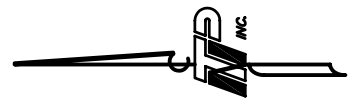
ELEV.= 594.57

SKETCH:



PLEASANT RUN ROAD

HAMPTON ROAD



MAPSCO 73 Z

N.T.S.



City of DeSoto

## BENCHMARK

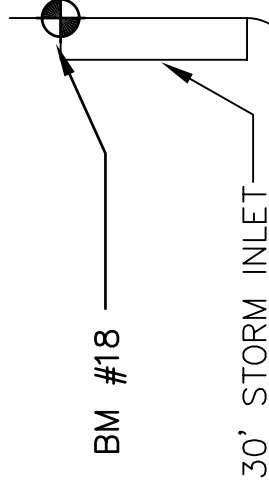
BENCHMARK NO. 18

DESCRIPTION: SQUARE CUT ON NE CORNER OF A  
30' INLET AT BACK OF CURB AND  
IS LOCATED AT THE NW CORNER  
OF PLEASANT RUN ROAD & POLK  
STREET INTERSECTION.

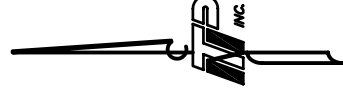
ELEV.= 554.34

MAPSCO 74 X

SKETCH:



PLEASANT RUN ROAD



N.T.S.

POLK STREET



City of DeSoto

## BENCHMARK

BENCHMARK NO. 19

DESCRIPTION: SQUARE CUT ON WEST END OF A HEADWALL AND IS LOCATED ON THE NORTH SIDE OF PLEASANT RUN ROAD, WEST OF I-35E AND IS BETWEEN TACO BUENO & THE CROSSING SHOPPING CENTER.

ELEV.= 556.01

MAPSCO 74 Z

SKETCH:

TACO BUENO  
1235  
PLEASANT RUN

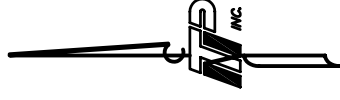
THE CROSSING  
SHOPPING  
CENTER



PLEASANT RUN ROAD

TO I-35E →

CONC HEADWALL



N.T.S.



City of DeSoto

## BENCHMARK

BENCHMARK NO. 19

DESCRIPTION: SQUARE CUT ON WEST END OF A HEADWALL AND IS LOCATED ON THE NORTH SIDE OF PLEASANT RUN ROAD, WEST OF I-35E AND IS BETWEEN TACO BUENO & THE CROSSING SHOPPING CENTER.

ELEV.= 556.01

MAPSCO 74 Z

SKETCH:

TACO BUENO  
1235  
PLEASANT RUN

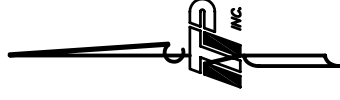
THE CROSSING  
SHOPPING  
CENTER



PLEASANT RUN ROAD

TO I-35E →

CONC HEADWALL



N.T.S.



City of DeSoto

## BENCHMARK

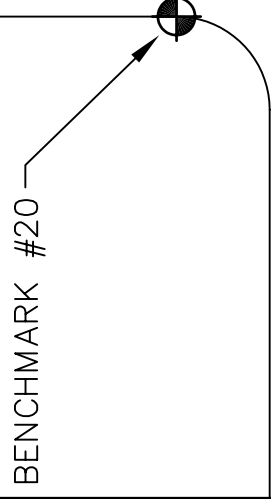
BENCHMARK NO. 20

### DESCRIPTION:

SQUARE CUT IN THE TOP OF CURB AT THE NORTH CURB RETURN AT THE NORTHWEST CORNER OF THE INTERSECTION OF HONOR DRIVE AND HANNA AVENUE.

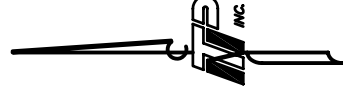
ELEV.= 596.02'

### SKETCH:



HANNA AVENUE

HONOR DRIVE



MAPSCO 74 S

N.T.S.



City of DeSoto

## BENCHMARK

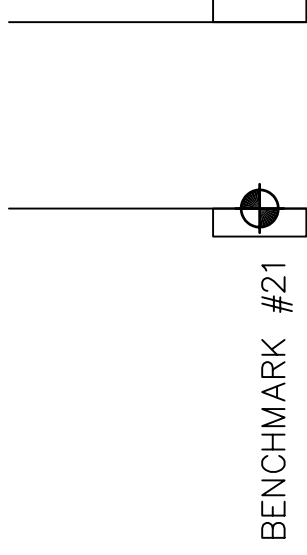
BENCHMARK NO. 21

### DESCRIPTION:

SQUARE CUT IN THE TOP OF CURB IN THE CENTERLINE OF A 10' INLET AT THE NORTHEAST CORNER OF THE INTERSECTION OF MARBLE CANYON DRIVE AND MANTLEBROOK DRIVE.

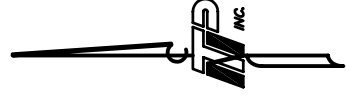
ELEV.= 578.31'

### SKETCH:



MANTLEBROOK DRIVE

MARBLE CANYON DRIVE



N.T.S.

MAPSCO 73 U



City of DeSoto

## BENCHMARK

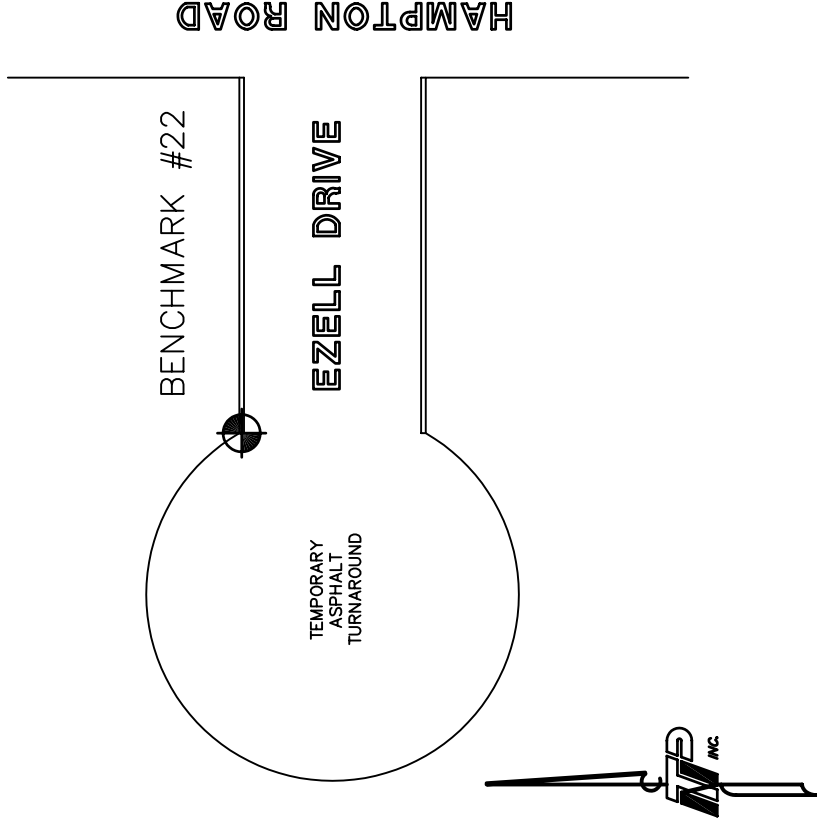
BENCHMARK NO. 22

### DESCRIPTION:

SQUARE CUT ON THE END OF A CONCRETE CURB ON THE NORTH SIDE OF EZELL DRIVE WEST OF HAMPTON ROAD.

ELEV.= 646.98'

### SKETCH:



MAPSCO 73 R

N.T.S.





City of DeSoto

## BENCHMARK

BENCHMARK NO. 23

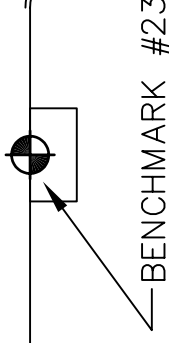
### DESCRIPTION:

SQUARE CUT ON THE TOP OF CURB AT  
THE CENTERLINE OF A 10' INLET AT THE  
SOUTHWEST CORNER OF OSPREY DRIVE  
AND CENTRE PARK BLVD.

ELEV.= 633.82'

### SKETCH:

CENTRE PARK BLVD.



OSPREY DRIVE



MAPSCO 74 N

N.T.S.



City of DeSoto

## BENCHMARK

BENCHMARK NO. 24

### DESCRIPTION:

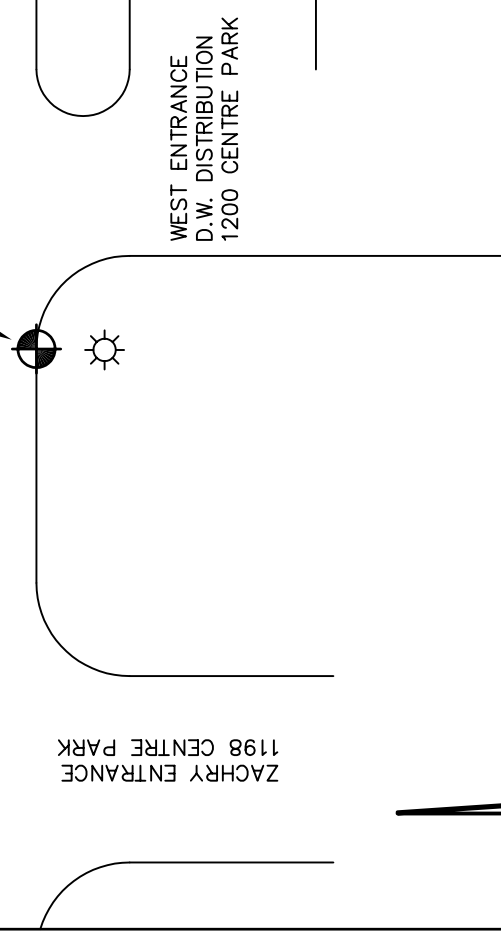
SQUARE CUT ON THE TOP OF CURB, ON THE SOUTH CURBLINE OF CENTRE PARK BLVD. BETWEEN THE DRIVEWAYS AT 1198 & 1200 CENTRE PARK BLVD.

ELEV.= 666.25'

### SKETCH:

CENTRE PARK BLVD.

BENCHMARK #24



MAPSCO 74 P

N.T.S.



City of DeSoto

## BENCHMARK

BENCHMARK NO. 25

### DESCRIPTION:

R.R. SPIKE SET IN THE NORTH FACE OF A  
POWER POLE IN THE SOUTH R.O.W. OF  
DANIELDALE ROAD, +/- 200' FEET EAST  
OF WESTMORELAND ROAD.

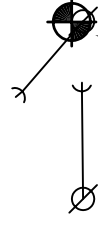
ELEV.= 669.99'

MAPSCO 73 K

### SKETCH:

DANIELDALE ROAD

WESTMORELAND ROAD

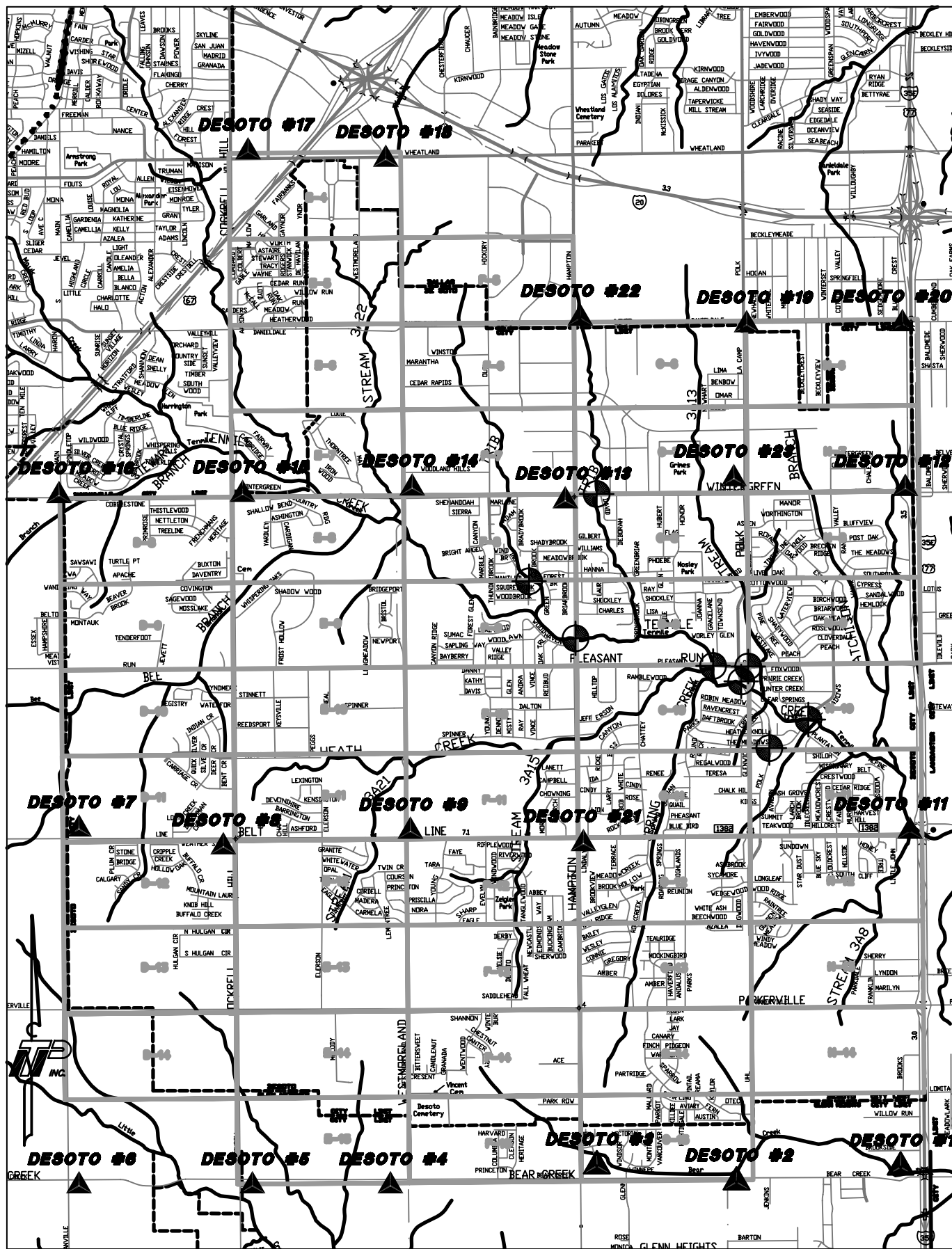


BENCHMARK #25

SWBT  
STATION



N.T.S.



SCALE: 1"=4000'

CITY OF DESOTO GEODETIC CONTROL NETWORK MAP

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #1		DATE: MAR&APR 2000	
MONUMENT TYPE: BERTNSEN TOP SECURITY W/ACCESS COVER			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS			
PREPARED BY: T.W.S.			
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
24.0'	NORTHWEST	POWER POLE	
23.7'	SOUTH	NORTH EDGE OF PWMT	
30.8'	SOUTHEAST	POWER POLE	
54.4'	EAST	SWC LIFT STATION	
AZIMUTH MARK	AZIMUTH	DISTANCE	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
BERTNSEN TOP SECURITY MONUMENT WITH ACCESS COVER STAMPED DESOTO #1, 2000, LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF BEAR CREEK ROAD EAST, AND INTERSTATE 35E FRONTAGE ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999879607		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 325966.871 E 2208572.947	0°22'09.20590"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6891143.932 E 2485048.247	0°54'52.08228"	
GEODETIC DATA		POSITION	NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE 32°33'39.44768"	NORTH
		LONGITUDE 96°49'23.85038"	WEST
		TRIG. LEVEL 615.44'	
FIELD SKETCH:			
<div><div>MAPSCO INC.</div><div><p>24.0'</p><p>23.7'</p><p>30.8'</p><p>54.4'</p><p>54.4'</p><p>30.8'</p><p>23.7'</p><p>24.0'</p><p>LIFT STATION</p><p>BEAR CREEK RD. EAST</p><p>TEXACO GAS STATION</p><p>I-35E SERVICE RD</p></div><div>N.T.S.</div></div>			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #2		DATE: MAR&APR 2000	
MONUMENT TYPE: BERTNSEN TOP SECURITY W/ACCESS COVER			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS PREPARED BY: T.W.S.			
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
14.00'	NORTH	MAILBOX	
43.20'	NORTHEAST	BUS STOP SIGN	
87.00'	EAST	POWER POLE	
AZIMUTH MARK			
AZIMUTH		DISTANCE	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
BERTNSEN TOP SECURITY MONUMENT WITH ACCESS COVER STAMPED, "CITY OF DESOTO #2, 2000". THE MONUMENT IS LOCATED JUST WEST OF UHL ROAD, AND IS 14' FEET SOUTH OF A MAILBOX AT 735 BEAR CREEK ROAD, AND 43.2' FEET SOUTHWEST OF THE DART BUS STOP #206.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999877969		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 325822.355 E 2203420.980	0°21'36.36823"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6890950.395 E 2479897.823	0°54'19.24343"	
GEODETIC DATA		POSITION	
LATITUDE 32°33'38.34212"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
LONGITUDE 96°50'24.06158"		NORTH WEST	
FIELD SKETCH:			
<div>MAPSCO INC</div> <div><p>UHL ROAD</p><p>BEAR CREEK ROAD</p><p>DART BUS STOP NO. 206</p><p>14.00'</p><p>43.20'</p><p>87.00'</p></div> <div>N.T.S.</div> <div>MAPSCO 84 T</div>			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #3		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
61.85'	WEST	PK NAIL IN PP	
27.20'	EAST	PK NAIL IN PP	
69.45'	SOUTHEAST	PK NAIL IN PP	
AZIMUTH MARK		GRID AZIMUTH	DISTANCE
TOP OF CHURCH STEEPLE		169°45'01"	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 3, 1992". MONUMENT IS LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF BEAR CREEK ROAD AND SOUTH HAMPTON ROAD, AND 4.0' FEET FROM THE EDGE OF THE ASPHALT.			
ADJUSTED HORIZONTAL CONTROL DATA			
ORDER: 2ND		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
COMBINED SCALE FACTOR: 0.999876412			
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 325871.602 E 2198259.040	0°21'03.47525"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6890950.259 E 2474735.536	0°53'46.34925"	
GEODETIC DATA		POSITION	NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE 32°33'39.14385"	NORTH
		LONGITUDE 96°51'24.37561"	WEST
FIELD SKETCH:			
N.T.S.			

# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #4		DATE: MAR&APR 2000		ADJUSTED HORIZONTAL CONTROL DATA			
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE				ORDER: 2ND	SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		
CITY: DESOTO		COUNTY: DALLAS	STATE: TX	COMBINED SCALE FACTOR: 0.999876367			
SURVEYOR: TEAGUE NALL AND PERKINS			PREPARED BY: T.W.S.				
PROJECT NAME: DES98312							
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS							
125.73'		NORTH		PK NAIL IN PP			
148.70'		NORTHEAST		PK NAIL IN PP			
31.10'		NORTHWEST		PK NAIL IN PP			
AZIMUTH MARK		GRID AZIMUTH	DISTANCE				
LIGHT DESOTO WATER TOWER		339°00'54"					
METRIC CONVERSION FACTOR: 3.2808333333							
GEODETIC DATA		POSITION		NAD 27	<input type="checkbox"/> NAD 83	<input checked="" type="checkbox"/> ELEV.(FEET)	
		LATITUDE		32°33'38.19850"		NORTH	TRIG. LEVEL
		LONGITUDE		96°52'27.28928"		WEST	683.52'
FIELD SKETCH:							

DESCRIPTION OF POINTS:

ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 4, 1992". MONUMENT IS LOCATED AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF BEAR CREEK ROAD AND WESTMORELAND ROAD. THE MONUMENT IS 36.0' FEET SOUTH OF THE SOUTH EDGE OF ASPHALT OF BEAR CREEK ROAD, AND 32.0' FEET WEST OF THE WEST EDGE OF ASPHALT OF WESTMORELAND ROAD.

N.T.S.

MAPSCO 83 T

N.T.S.

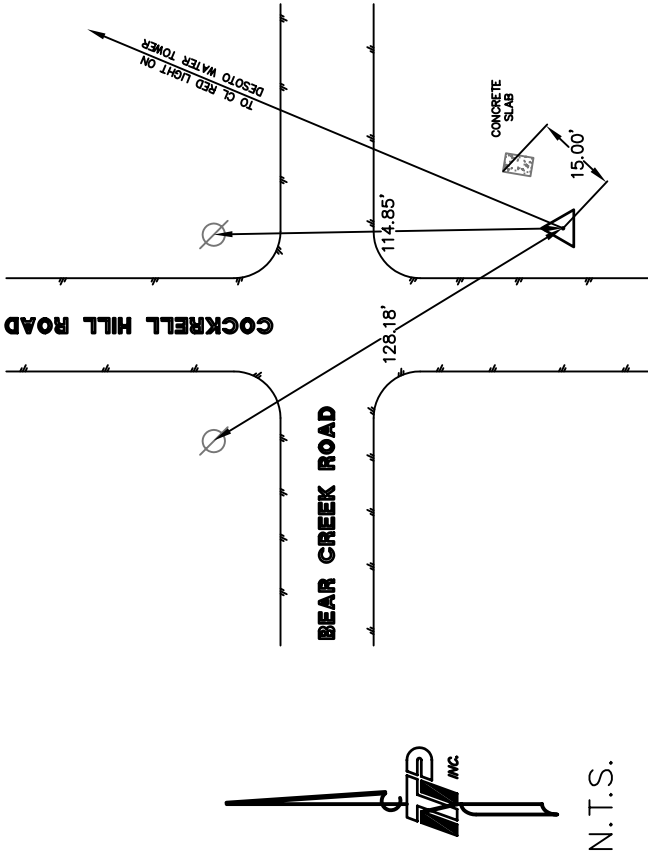


# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #5		DATE: MAR&APR2000	
ADJUSTED HORIZONTAL CONTROL DATA			
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE		ORDER: 2ND	SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>
CITY: DESOTO	COUNTY: DALLAS	COMBINED SCALE FACTOR: 0.999876468	
SURVEYOR: TEAGUE NALL AND PERKINS		NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)
PROJECT NAME: DES98312		PLANE AZIMUTH ANGLE (CONVERGENCE)	
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS		STATE: TX	0°19'56.30269"
15.00'	NORTHEAST	ZONE: NC	
	"X" CUT IN CONC	CODE: 4202	
128.18'	NORTHWEST	COORDINATES (U.S. SURVEY FEET)	
114.85'	WEST	PLANE AZIMUTH ANGLE (CONVERGENCE)	
		STATE: TX	0°52'39.17426"
		ZONE: NC	
		CODE: 4202	
AZIMUTH MARK	GRID AZIMUTH	METRIC CONVERSION FACTOR: 3.2808333333	
WATER TOWER	28°41'28"		

DESCRIPTION OF POINTS:	GEODETIC DATA	POSITION	NAD 27	<input type="checkbox"/> NAD 83	<input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE	32°33'38.12334"		NORTH
		LONGITUDE	96°53'27.54194"		WEST
FIELD SKETCH:					

ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 5, 1992". THE MONUMENT IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF BEAR CREEK ROAD AND COCKRELL HILL ROAD. THE MONUMENT IS LOCATED 12.3' FEET EAST OF THE EAST EDGE OF ASPHALT OF COCKRELL HILL ROAD, AND 63.0' FEET SOUTH OF THE SOUTH EDGE OF ASPHALT OF BEAR CREEK ROAD.



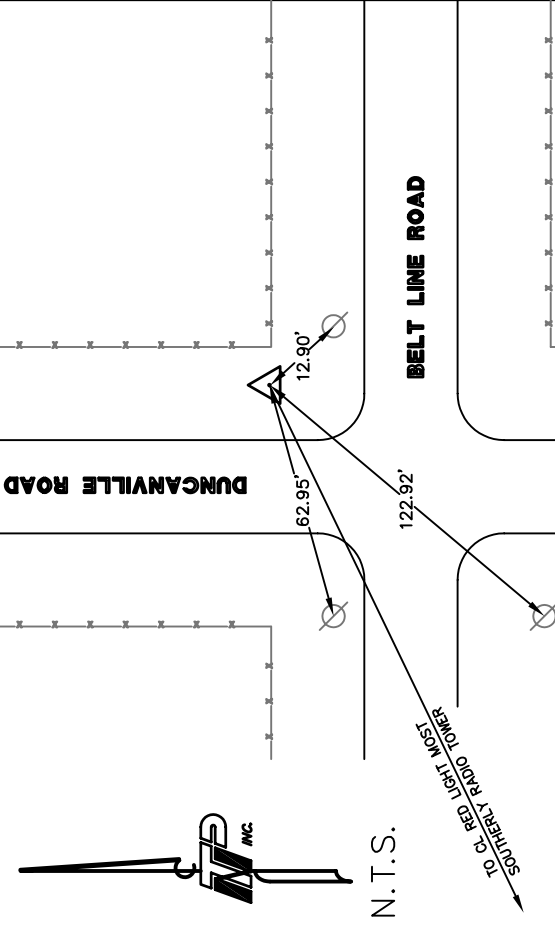
MAPSCO 82 V

N.T.S.

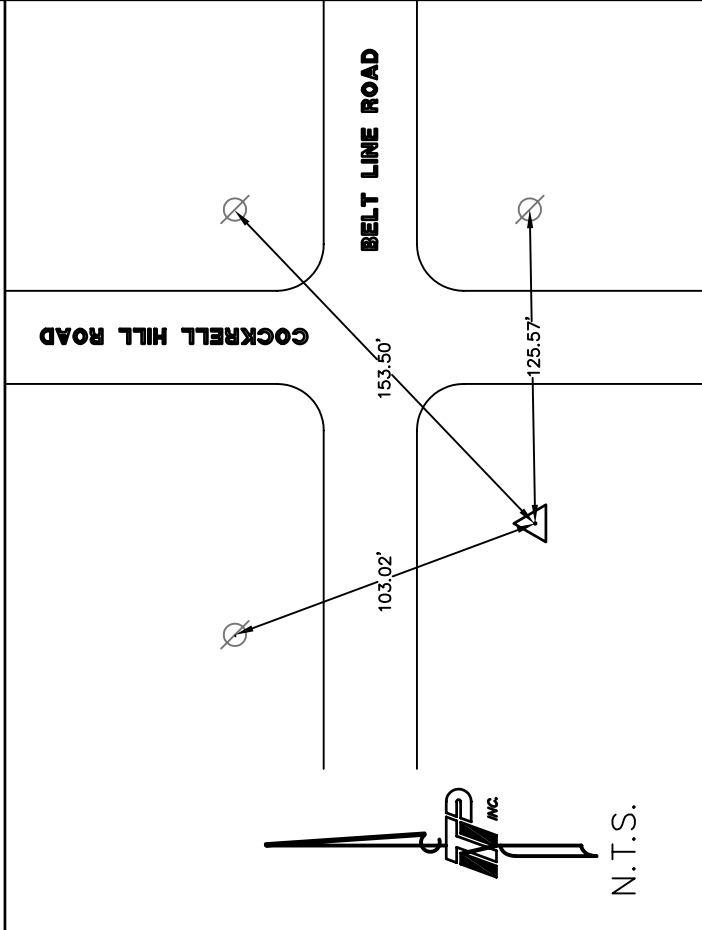
GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #6		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO		COUNTY: DALLAS	STATE: TX
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: TWS	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
23.60'	SOUTH	PK NAIL IN PP	
47.05'	SOUTHWEST	CENTER TOP FH	
81.05'	NORTHWEST	PK NAIL IN PP	
AZIMUTH MARK	GRID AZIMUTH	DISTANCE	
WATER TOWER	56°07'33"		
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 6, 1992". THE MONUMENT IS LOCATED IN THE SOUTHEAST CORNER OF THE INTERSECTION OF BEAR CREEK ROAD AND DUNCANVILLE ROAD. THE MONUMENT IS LOCATED 11.8' FEET EAST OF THE EAST EDGE OF ASPHALT OF DUNCANVILLE ROAD, AND 25.5' FEET SOUTH OF THE SOUTH EDGE OF ASPHALT OF BEAR CREEK ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999874134		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 325734.399 E 2182434.486	0°19'22.62405"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6890662.586 E 2458912.755	0°52'05.49439"	
GEODETIC DATA		POSITION	
LATITUDE 32°33'38.70825"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
LONGITUDE 96°54'29.29518"		NORTH WEST	
FIELD SKETCH:			

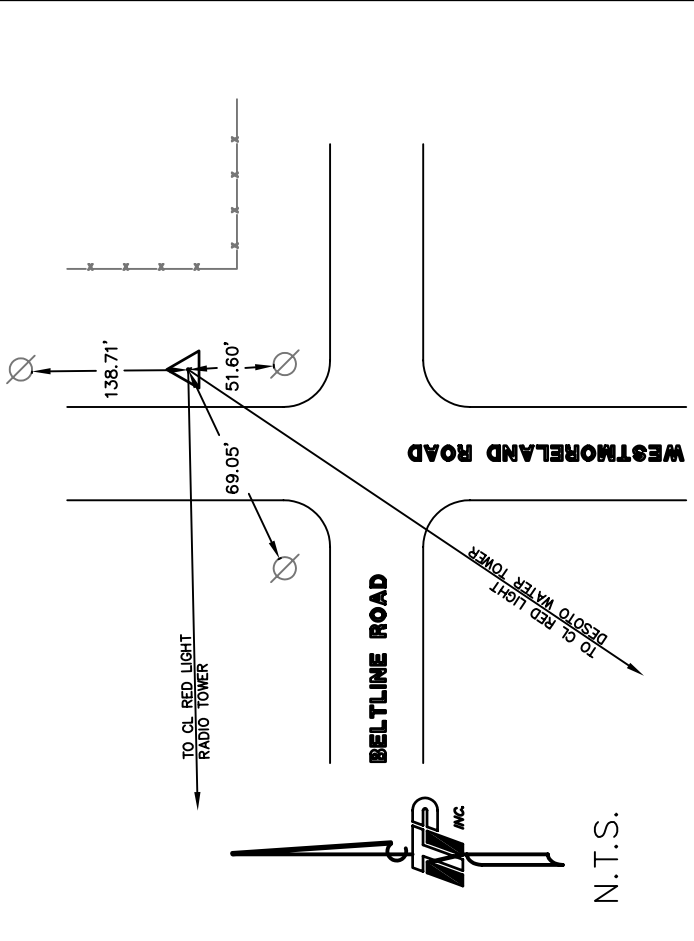
GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #7		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: TWS	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
62.95'	WEST	PK NAIL IN PP	
12.90'	SOUTH	PK NAIL IN PP	
122.92'	SOUTHWEST	PK NAIL IN PP	
AZIMUTH MARK		AZIMUTH	
		DISTANCE	
METRIC CONVERSION FACTOR: 3.2808333333			
GEODETIC DATA		POSITION	
		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/>	
		LATITUDE 32°35'24.05952" NORTH	
		LONGITUDE 96°54'29.57973" WEST	
		ELEV.(FEET) 739.38'	
FIELD SKETCH:			
			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 7, 1992". THE MONUMENT IS LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF BELT LINE ROAD AND DUNCANVILLE ROAD. THE MONUMENT IS LOCATED 13.5' FEET EAST OF THE EAST EDGE OF ASPHALT OF DUNCANVILLE ROAD, AND 28.0' FEET NORTH OF THE NORTH EDGE OF ASPHALT OF BELT LINE ROAD.			
MAPSCO 82 G			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #8		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO		COUNTY: DALLAS	STATE: TX
SURVEYOR: TEAGUE NALL AND PERKINS			
PROJECT NAME: DES98312			
PREPARED BY: TWS			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
103.02'	NORTHWEST	PK NAIL IN PP	
153.50'	NORTHEAST	PK NAIL IN PP	
125.57'	EAST	PK NAIL IN PP	
AZIMUTH MARK			
RADIO TOWER		GRID AZIMUTH	DISTANCE
		253°16'42"	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 8, 1992". THE MONUMENT IS AT THE SOUTHWEST CORNER OF THE INTERSECTION OF BELT LINE ROAD AND COCKRELL HILL ROAD. THE MONUMENT IS LOCATED 24.0' FEET SOUTH OF THE SOUTH EDGE OF ASPHALT OF BELT LINE ROAD, AND 68.0' FEET WEST OF THE WEST EDGE OF ASPHALT OF COCKRELL HILL ROAD.			
STATION NAME: DESOTO #8		ADJUSTED HORIZONTAL CONTROL DATA	
ORDER: 2ND		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
COMBINED SCALE FACTOR: 0.999870061			
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 336284.235 E 2187503.157	0°19'55.31565"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6901260.323 E 2463880.895	0°52'38.18645"	
GEODETIC DATA		POSITION	
		LATITUDE 32°35'22.81753"	
		LONGITUDE 96°53'29.35313"	
		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
		NORTH	
		WEST	
		728.67'	
FIELD SKETCH:			
			
N.T.S.			
MAPSCO 82 H			

# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #9		DATE: MAR&APR 2000		ADJUSTED HORIZONTAL CONTROL DATA			
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE				ORDER: 2ND	SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		
CITY: DESOTO	COUNTY: DALLAS	STATE: TX		COMBINED SCALE FACTOR: 0.999871030			
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.		NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
PROJECT NAME: DES98312				STATE: TX ZONE: NC CODE: 4202	N 336458.310 E 2192875.748	0°20'29.57109"	
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS				NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
138.71'	NORTH	PK NAIL IN PP		STATE: TX ZONE: NC CODE: 4202	N 6901485.478 E 2469251.692	0°53'12.44308"	
51.60'	SOUTH	PK NAIL IN PP					
69.05'	SOUTHWEST	PK NAIL IN PP					
AZIMUTH MARK		GRID AZIMUTH					
RADIO TOWER		256°59'28"		METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:				GEODETIC DATA		POSITION	
				LATITUDE 32°35'24.22716"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
				LONGITUDE 96°52'26.54161"		NORTH WEST TRIG. LEVEL 707.26'	
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 9, 1992". MONUMENT IS LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF BELT LINE ROAD AND WESTMORELAND ROAD. THE MONUMENT IS LOCATED 25.7' FEET EAST OF THE CENTERLINE OF WESTMORELAND ROAD AND 85.2' FEET NORTH OF THE CENTERLINE OF BELT LINE ROAD.				FIELD SKETCH: 			
MAPSCO 83 F							

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #11		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO		COUNTY: DALLAS	STATE: TX
SURVEYOR: TEAGUE NALL AND PERKINS			
PROJECT NAME: DES98312			
PREPARED BY: T.W.S.			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
115.50'	SOUTHWEST	PK NAIL IN PP	
85.11'	SOUTHWEST	"X" CUT	
62.57'	NORTHWEST	"X" CUT	
AZIMUTH MARK			
MICROWAVE TOWER		GRID AZIMUTH	DISTANCE
		116°11'41"	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, " CITY OF DESOTO, MON. 11, 1992". MONUMENT IS LOCATED ALONG THE PROJECTED CENTERLINE OF BELT LINE ROAD BETWEEN THE SOUTHBOUND MAIN LANES OF INTERSTATE HIGHWAY 35 EAST AND THE BECKLEY AVENUE FRONTAGE ROAD. THE MONUMENT IS LOCATED 8.4' FEET NORTHEAST OF THE GAUDDRAL, AND 11.0' FEET EAST OF THE EAST EDGE OF ASPHALT OF BECKLEY AVENUE.			
ADJUSTED HORIZONTAL CONTROL DATA			
ORDER: 2ND		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
COMBINED SCALE FACTOR: 0.999879690			
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 336459.830 E 2208576.455	0°22'09.66119"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6901636.323 E 2484951.980	0°54'52.53669"	
GEODETIC DATA		POSITION	NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE 32°35'23.27747"	NORTH
		LONGITUDE 96°49'23.01812"	WEST
FIELD SKETCH:			
<p>The field sketch shows a plan view of the survey area. Beckley Avenue runs diagonally from the top left towards the bottom right. Belt Line Road runs horizontally across the middle. Interstate Highway 35 East runs vertically on the right side. A monument is located at the intersection of Beckley Avenue and Belt Line Road. Distances are marked: 115.50' from the monument to the PK nail in PP, 85.11' to the 'X' cut, and 62.57' to another 'X' cut. A microwave tower is shown with a distance of 116°11'41" from the monument. A strobe light on a microwave tower is also indicated. The sketch is oriented with North at the top.</p>			
N.T.S.			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #12		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
154.82'	NORTHWEST	CENTER TOP FH	
186.10'	SOUTHWEST	PK NAIL IN PP	
84.99'	SOUTHWEST	AZIMUTH MARK	
AZIMUTH MARK	GRID AZIMUTH	DISTANCE	
RADIO TOWER	246°25'38"		
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED "CITY OF DESOTO, MON. 12, 1992". MONUMENT IS LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF WINTERGREEN ROAD AND THE SOUTHBOUND ACCESS ROAD OF INTERSTATE HIGHWAY 35 EAST . THE MONUMENT IS LOCATED 80.5' FEET NORTH OF THE NORTH CURB OF WINTERGREEN ROAD AND 85.5' FEET WEST OF THE WEST EDGE OF ASPHALT OF THE SOUTHBOUND FRONTAGE ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999870945		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 347099.868 E 2208289.052	0°22'08.26398"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6912273.207 E 2484563.017	0°54'51.13853"	
GEODETIC DATA		POSITION NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
		LATITUDE 32°37'08.58307" NORTH	
		LONGITUDE 96°49'25.58031" WEST	
FIELD SKETCH:			
<div><div>MAPSCO INC.</div><div></div></div>			

# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #13			DATE: MAR & APR 2000		
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE					
CITY: DESOTO		COUNTY: DALLAS		STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS			PREPARED BY: T.W.S.		
PROJECT NAME: DES98312					
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS					
147.08'	NORTHWEST		PK NAIL IN PP		
62.46'	NORTHEAST		"X" CUT		
156.23'	SOUTH		PK NAIL IN PP		
AZIMUTH MARK		GRID AZIMUTH		DISTANCE	
RADIO TOWER		250°46'43"			
DESCRIPTION OF POINTS:					
<p>ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 13, 1992". MONUMENT IS LOCATED IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF WINTERGREEN ROAD AND HAMPTON ROAD. MONUMENT IS LOCATED 4.5' FEET WEST OF THE WEST CURB OF HAMPTON ROAD, AND 32.8' FEET SOUTHWEST OF THE END OF THE SIDEWALK ALONG WINTERGREEN ROAD.</p>					
<p>MAPSCO 73 V</p> <p>N.T.S.</p>					



GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #14		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO		COUNTY: DALLAS	STATE: TX
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
80.90'	SOUTHWEST	PK NAIL IN PP	
37.35'	NORTHWEST	PK NAIL IN PP	
149.63'	EAST	PK NAIL IN PP	
AZIMUTH MARK		GRID AZIMUTH	DISTANCE
WATER TOWER		183°34'31"	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE, INSIDE A CAST IRON WATER METER BOX STAMPED, "CITY OF DESOTO, MON. 14, 1992". MONUMENT IS LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF WINTERGREEN ROAD AND WESTMORELAND ROAD. MONUMENT IS LOCATED 29.1' FEET NORTH OF THE NORTH EDGE OF ASPHALT OF WINTERGREEN ROAD AND 66.0' FEET EAST OF THE EAST EDGE OF ASPHALT OF WESTMORELAND ROAD.			
ORDER: 2ND		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
COMBINED SCALE FACTOR: 0.999873135			
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 346888.610 E 2192854.119	0°20'29.82946"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6911915.109 E 2469130.683	0°53'12.70070"	
GEODETIC DATA		POSITION	NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE 32°37'07.44004"	NORTH
		LONGITUDE 96°52'26.06897"	WEST
		581.66'	
FIELD SKETCH:			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #15		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
72.34'	NORTHWEST	PK NAIL IN PP	
69.87'	NORTHWEST	PK NAIL IN PP	
174.40'	NORTHWEST	PK NAIL IN PP	
AZIMUTH MARK			
	GRID AZIMUTH	DISTANCE	
	232°17'58"		
RADIO TOWER			
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 15, 1992". MONUMENT IS LOCATED ON THE EAST SIDE OF COCKRELL HILL ROAD, 121.0' FEET SOUTH OF THE PROJECTED CENTERLINE OF THE WEST LEG OF WINTERGREEN ROAD. THE MONUMENT IS ALSO LOCATED 11.5' FEET EAST OF THE EAST EDGE OF PAVEMENT OF COCKRELL HILL ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999870696		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 346709.664 E 2187526.905	0°19'55.85201"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6911685.520 E 2463805.268	0°52'38.72212"	
GEODETIC DATA		POSITION	
LATITUDE 32°37'05.97973"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
LONGITUDE 96°53'28.37097"		NORTH WEST	
FIELD SKETCH:			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #16		DATE: MAR&APR 2000	
MONUMENT TYPE: BERTNSEN TOP SECURITY W/ACCESS COVER			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: TWS	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
4.7'	EAST	BACK OF CURB	
4.7'	WEST	BARBED WIRE FENCE	
AZIMUTH MARK	AZIMUTH	DISTANCE	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
BERTNSEN TOP SECURITY MONUMENT WITH ACCESS COVER STAMPED, "CITY OF DESOTO #16, 2000". THE MONUMENT IS LOCATED AT THE PROJECTED CENTERLINE OF MEADOW CREEK DRIVE ON THE WEST SIDE OF DUNCANVILLE (SOUTH MAIN STREET) ROAD. THE MONUMENT IS LOCATED 4.7' FEET WEST OF THE WEST CURBLINE OF DUNCANVILLE ROAD, AND 4.7' FEET EAST OF A BARBED WIRE FENCE.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999867931		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 347668.788 E 2182114.637	0°19'21.37336"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6912593.106 E 2458384.051	0°52'04.24224"	
GEODETIC DATA		POSITION	NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE 32°37'15.77674"	NORTH
		LONGITUDE 96°54'31.59105"	WEST
FIELD SKETCH:			
<p>MAPSCO 72 Q</p> <p>N.T.S.</p>			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #17		DATE: MAR&APR 2000	
MONUMENT TYPE: BERNITSEN TOP SECURITY W/ACCESS COVER			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS			
PREPARED BY: T.W.S.			
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
252.0'	WEST	W. CB COCKRELL HILL	
13.7'	WEST	LIGHT STANDARD	
15.7'	SOUTH	N. CB WHEATLAND	
AZIMUTH MARK	AZIMUTH	DISTANCE	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
BERNSTEN TOP SECURITY MONUMENT WITH ACCESS COVER STAMPED, "CITY OF DESOTO MON. 17, 2000". THE MONUMENT IS LOCATED 252' FEET EAST OF THE EAST CURBLINE OF COCKRELL HILL ROAD, 15.7' FEET NORTH OF THE NORTH CURBLINE OF WHEATLAND ROAD, AND 13.7' FEET EAST OF A LIGHT STANDARD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999863907		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 357370.849 E 2187717.199	0°19'57.46017"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6922348.039 E 2463893.988	0°52'40.32959"	
GEODETIC DATA		POSITION	
LATITUDE 32°38'51.46507"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
LONGITUDE 96°53'25.42361"		NORTH WEST	
FIELD SKETCH:			
<p>WALGREENS DRUG STORE</p> <p>252.0'</p> <p>13.7'</p> <p>15.7'</p> <p>WHEATLAND ROAD</p> <p>COCKRELL HILL ROAD</p> <p>N.T.S.</p>			
MAPSCO 72 D			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #18		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO		COUNTY: DALLAS	STATE: TX
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: TWS	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
57.20'	NORTHEAST	PK NAIL IN PP	
56.12'	SOUTHEAST	PK NAIL IN PP	
76.70'	SOUTHWEST	PK NAIL IN PP	
AZIMUTH MARK		GRID AZIMUTH	DISTANCE
WATER TOWER		328°57'45"	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED "CITY OF DESOTO, MON. 18, 1992". THE MONUMENT IS LOCATED ON THE EAST END OF A CONCRETE MEDIAN ON WHEATLAND ROAD, APPROXIMATELY 0.6 MILES EAST OF THE INTERSECTION OF WHEATLAND ROAD AND HIGHWAY 67. THE MONUMENT IS LOCATED 25' FEET WEST OF THE EAST END OF THE MEDIAN NOSE ALONG THE CENTERLINE OF THE MEDIAN.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999897334		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 357366.752 E 2192617.548	0°20'28.71892"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6922390.563 E 2468794.199	0°53'11.58936"	
GEODETIC DATA		POSITION	NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)
		LATITUDE 32°38'51.13922"	NORTH
		LONGITUDE 96°52'28.10771"	WEST
			685.94'
FIELD SKETCH:			
<div><div>MAPSCO INC</div><div><p>TO CL RED LIGHT ON WATER TOWER</p><p>WHEATLAND ROAD</p><p>CHARLTON METHODIST HOSPITAL PARKING</p></div><div>N.T.S.</div></div>			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #19		DATE: MAR&APR 2000	
MONUMENT TYPE: BERTNSEN TOP SECURITY W/ACCESS COVER			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS			
PREPARED BY: T.W.S.			
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
21.5'	SOUTHWEST	POWER POLE	
12.0'	WEST	GUYWIRE	
AZIMUTH MARK	AZIMUTH	DISTANCE	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
BERTNSEN TOP SECURITY MONUMENT WITH ACCESS COVER STAMPED, "CITY OF DESOTO MON. 19, 2000". THE MONUMENT IS LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF DANIELDALE ROAD AND POLK STREET. THE MONUMENT IS LOCATED 21.5' FEET NORTHEAST OF A POWER POLE, 12.0' FEET EAST OF A GUYWIRE, AND 25.0' FEET SOUTH OF THE SOUTH EDGE OF ASPHALT OF DANIELDALE ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999868069		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 352171.816 E 2203288.661	0°21'36.58054"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6917297.389 E 2479514.430	0°54'19.45361"	
GEODETIC DATA		POSITION	
LATITUDE 32°37'59.08697"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
LONGITUDE 96°50'23.67621"		NORTH WEST	
FIELD SKETCH:			

# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #20		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
191.70'	WEST	PK IN PP	
111.34'	NORTHEAST	"X" CUT	
86.56'	NORTHEAST	"X" CUT	
AZIMUTH MARK		GRID AZIMUTH	DISTANCE
WATER TOWER		208°41'58"	
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 20, 1992". MONUMENT IS LOCATED IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF DANIELDALE ROAD AND THE SOUTHBOUND FRONTAGE ROAD OF INTERSTATE HIGHWAY 35 EAST. THE MONUMENT IS LOCATED 20.9' FEET SOUTH OF THE SOUTH EDGE OF DANIELDALE ROAD AND 26.6' WEST OF THE WEST EDGE OF THE FRONTAGE ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA		ORDER: 2ND	
COMBINED SCALE FACTOR: 0.999867132		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 352231.207 E 2208258.292	0°22'08.27855"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6917404.040 E 2484483.358	0°54'51.15266"	
GEODETIC DATA		POSITION	
LATITUDE 32°37'59.36146"		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET)	
LONGITUDE 96°49'25.55441"		NORTH WEST	
FIELD SKETCH:			
<p>                         The sketch shows a monument (a circle with a cross) located at the intersection of Danieldale Road and Access Road. The monument is 111.34' from the intersection along Danieldale Road and 86.56' from the intersection along Access Road. The monument is also 191.70' from the intersection along the frontage road. The sketch includes a north arrow and a scale bar.                     </p>			
<p>INTERSTATE HIGHWAY 35 EAST (SOUTHBOUND)</p> <p>ACCESS ROAD</p> <p>DANIELDALE ROAD</p> <p>111.34'</p> <p>86.56'</p> <p>191.70'</p> <p>TO GLENN HEIGHTS WATER TOWER</p> <p>N.T.S.</p>			
<p>MAPSCO 74 M</p>			

GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #21		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
73.60'	NORTH	PK NAIL IN PP	
55.75'	SOUTH	PK NAIL IN PP	
79.55'	WEST	PK NAIL IN PP	
AZIMUTH MARK		AZIMUTH	DISTANCE
METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:			
ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 21, 1992". THE MONUMENT IS LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF BELT LINE ROAD AND HAMPTON ROAD. THE MONUMENT IS LOCATED 5.0' FEET SOUTH OF THE SOUTH CURBLINE OF BELT LINE ROAD.			
ADJUSTED HORIZONTAL CONTROL DATA			
ORDER: 2ND		SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
COMBINED SCALE FACTOR: 0.999873109			
NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 336333.490 E 2198163.123	0°21'03.27187"	
NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
STATE: TX ZONE: NC CODE: 4202	N 6901411.000 E 2474539.861	0°53'46.14506"	
GEODETIC DATA		POSITION	
		LATITUDE 32°35'22.67609"	
		LONGITUDE 96°51'24.75004"	
		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/>	
		ELEV.(FEET)	
		NORTH	
		WEST	
		664.90'	
FIELD SKETCH:			
<p>MAPSCO INC</p> <p>N.T.S.</p> <p>MAPSCO 83 H</p>			



# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #22		DATE: MAR&APR 2000		ADJUSTED HORIZONTAL CONTROL DATA			
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE				ORDER: 2ND	SURVEY METHOD: GPS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		
CITY: DESOTO	COUNTY: DALLAS	STATE: TX		COMBINED SCALE FACTOR: 0.999868006			
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.		NAD 27 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
PROJECT NAME: DES98312				STATE: TX ZONE: NC CODE: 4202	N 352176.797 E 2198042.696	0°21'03.12268"	
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS				NAD 83 GRID DATA	COORDINATES (U.S. SURVEY FEET)	PLANE AZIMUTH ANGLE (CONVERGENCE)	
41.90'	NORTHWEST	"X" CUT		STATE: TX ZONE: NC CODE: 4202	N 6917252.458 E 2474268.602	0°53'45.99463"	
62.09'	SOUTH	PK NAIL IN PP					
112.90'	SOUTHWEST	PK NAIL IN PP					
AZIMUTH MARK		AZIMUTH		DISTANCE			
				METRIC CONVERSION FACTOR: 3.2808333333			
DESCRIPTION OF POINTS:  ALUMINUM CAP SET IN CONCRETE STAMPED, "CITY OF DESOTO, MON. 22, 1992". THE MONUMENT IS LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF DANIELDALE ROAD AND HAMPTON ROAD. THE MONUMENT IS LOCATED 15.0' FEET NORTH OF THE NORTH EDGE OF ASPHALT OF DANIELDALE ROAD AND 4.0' FEET EAST OF THE EAST CURB OF HAMPTON ROAD.				GEODETIC DATA		ELEV.(FEET)	
				POSITION		NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/>	
				LATITUDE 32°37'59.45847"		NORTH WEST	
				LONGITUDE 96°51'25.02443"		WEST 650.82'	
				FIELD SKETCH:			
MAPSCO 73 M  N.T.S.							

# GEODETIC CONTROL DATA SHEET

STATION NAME: DESOTO #23		DATE: MAR&APR 2000	
MONUMENT TYPE: ALUMINUM CAP SET IN CONCRETE			
CITY: DESOTO	COUNTY: DALLAS	STATE: TX	
SURVEYOR: TEAGUE NALL AND PERKINS		PREPARED BY: T.W.S.	
PROJECT NAME: DES98312			
DISTANCES & DIRECTIONS TO PROMINENT & REFERENCE MARKS			
109.88'	EAST	PK NAIL IN PP	
144.89'	SOUTHEAST	PK NAIL IN PP	
94.33'	SOUTH	PK NAIL IN PP	
AZIMUTH MARK		AZIMUTH	
		DISTANCE	
DESCRIPTION OF POINTS:  ALUMINUM CAP SET IN CONCRETE STAMPED, " CITY OF DESOTO, MON. 23, 1992". THE MONUMENT IS LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF WINTERGREEN ROAD AND POLK STREET. THE MONUMENT IS LOCATED 5.7' FEET NORTH OF THE NORTH CURB OF WINTERGREEN ROAD AND 86.0' FEET WEST OF THE CENTERLINE OF POLK STREET.			
ADJUSTED HORIZONTAL CONTROL DATA  ORDER: 2ND COMBINED SCALE FACTOR: 0.999870816 NAD 27 GRID DATA COORDINATES (U.S. SURVEY FEET) STATE: TX ZONE: NC CODE: 4202 N 346996.311 E 2203228.606 PLANE AZIMUTH ANGLE (CONVERGENCE) 0°21'35.99012"			
NAD 83 GRID DATA COORDINATES (U.S. SURVEY FEET) STATE: TX ZONE: NC CODE: 4202 N 6912121.510 E 2479503.720 PLANE AZIMUTH ANGLE (CONVERGENCE) 0°54'18.86358"			
METRIC CONVERSION FACTOR: 3.2808333333			
GEODETIC DATA		POSITION NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> ELEV.(FEET) LATITUDE 32°37'07.87701" NORTH LONGITUDE 96°50'24.75773" WEST 630.34'	
FIELD SKETCH:			
MAPSCO 74 T		N.T.S.	